

Coastal Wildlife Habitat Management at Stewart B. McKinney National Wildlife Refuge

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Stewart B. McKinney National Wildlife Refuge (SBMNWR) is located along 100 miles of Connecticut's coastline from Stonington to Greenwich. It includes eight islands, as well as two salt marsh units and a barrier beach. Established in 1972 and originally called Salt Meadow NWR, the Refuge was renamed in 1987 to honor the late U.S. Congressman Stewart B. McKinney, who was instrumental in expanding it. Located in the Atlantic Flyway, the refuge provides important nesting, feeding, and resting habitat for many wading birds, shorebirds, songbirds, and seabirds, including the federally and state endangered roseate tern.

SBMNWR is part of a larger "system" of wildlife refuges that spans the entire country. There are more than 560 refuges nationwide – most of which are located along bird migration routes and total over 150 million acres. The mission of the National Wildlife Refuge System is to conserve and manage this network of

land to provide habitat for wildlife species for the benefit of present and future generations of Americans.

In Connecticut, the Refuge staff is committed to enhancing and protecting habitat for coastal species, such as the state endangered plant, salt marsh pink, and the federally and state threatened piping plover. Here are some highlights of management activities around the Refuge.

Bats, Bees, and Butterflies

Many pollinator species are in decline around the world. In response, Refuge staff has been working to catalogue the pollinators on the Refuge, as well as to create habitat for them.

For the past three years, the Refuge has partnered with the Connecticut Agricultural Experiment Station, under the direction of Dr. Kimberly Stoner, to collect data about bee species at the Salt Meadow Unit in Westbrook. This is a long-term statewide study, with a goal of establishing a baseline of bee species in Connecticut which will help us determine what species are missing or in decline. In 2012, 47 different types of bees were collected on the Refuge, including an uncommon species that was last found in Connecticut in 1915 and one species that had never been recorded in the state. In addition to bees, the Refuge also surveys butterflies and bats at Salt Meadow.

With help from local garden clubs, Refuge staff and volunteers opened ground on Outer Island (in the Thimble Islands of Branford) this past September to make room for a pollinator garden, which will showcase native plant species that benefit butterflies, other insects, and birds. The staff also plans to draw attention to the state-listed prickly pear cactus that occurs there.

Colonial Breeding Birds

There aren't many islands in Long Island Sound where hundreds or even thousands of birds can come together and form "colonies" during the breeding season. Herons, egrets, and terns are just a few examples of "colonial nesters." These species nest in colonies as a defense

against predators. The Refuge provides habitat for these species on some of its coastal islands.

Falkner Island – three miles off the coast of Guilford – is home to the largest common tern colony in the state. Thousands of common terns and a small population of endangered roseate terns breed here from May until August each year. Refuge staff members are on the island every day during this period studying productivity of the terns, limiting disturbance to the colony, and recording the leg band combinations of adult birds that are breeding. A lot of work goes into preparing the island for the terns; this work happens in spring and fall. The Refuge is always on the lookout for volunteers willing to help with vegetation control and general maintenance of island research facilities. Additionally, the public can see what is happening on the island thanks to the Faulkner's Light Brigade which has a webcam on the island that can be viewed via their website (faulknerslight.org).

In the 1980s, Chimon Island (Norwalk) hosted one of the largest heron and egret colonies in the Sound. Thousands of birds nested there; yet today, there are none. The cause of the island being abandoned as a colony is unknown; however, it has been suggested that an increase in raccoon presence on the island was at the root of it. Refuge staff would like to see the island restored to its former glory as a wading bird colony, and we are in the process of making this happen. Habitat assessment, improvement, and creation are in the works for 2015.

Shorebirds

The Connecticut coast is a haven for shorebirds stopping during spring and fall migration and raising young during the breeding season. At the same time, it also is desired real estate and attracts thousands of people each spring and summer. The influx of human population density in these coastal areas puts significant pressure on shorebird species. In order to mitigate these effects, it is essential that some coastal habitat be protected for wildlife and – in areas that humans and wildlife must "coexist" – outreach programs are established to educate people about sharing the habitat.





(Clockwise left to right) A common tern on Falkner Island; Mariah Box, a summer intern, working with the terns on Falkner Island; and an Atlantic Coast piping plover on the McKinney Refuge's Milford Point Unit.



The Refuge's barrier beach on Milford Point provides nesting habitat for the American oystercatcher, piping plover, least tern, and killdeer. The dunes and beaches are closed annually from April to September to allow these species to breed with little to no disturbance. The Refuge also manages a large fenced area as a least tern colony, attracting the birds using tern decoys and sound.

Each year, the Refuge partners with DEEP and the Audubon Alliance for

Coastal Waterbirds to train and manage shorebird monitors. These volunteers visit coastal areas where shorebirds nest, keep track of adult and chick survival, and talk with people about these species and their habitat. This program has been ongoing for several years and is extremely successful.

For more information about the Refuge or its management activities, please

contact Kris Vagos – the Refuge Wildlife Biologist – at Kristina_Vagos@fws.gov. You also may want to visit the Refuge website (fws.gov/refuge/stewart_b_mckinney/) and check us out on Facebook (facebook.com/SBMcKinneyNWR).

